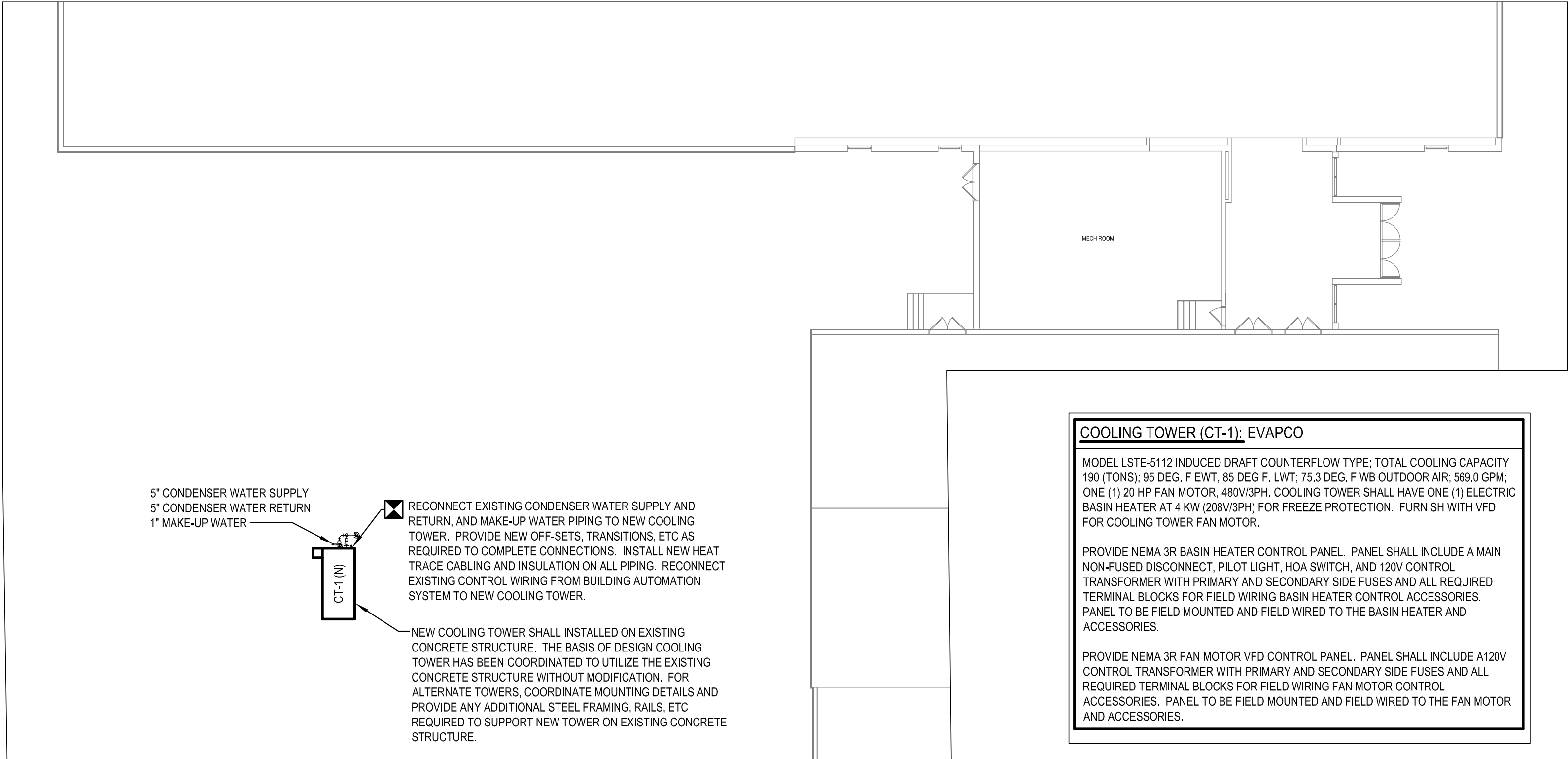


DEMOLITION WORK - HVAC PLAN

SCALE: 1/16" = 1'-0"



NEW WORK - HVAC PLAN

SCALE: 1/16" = 1'-0"

COOLING TOWER (CT-1): EVAPCO

MODEL LSTE-5112 INDUCED DRAFT COUNTERFLOW TYPE; TOTAL COOLING CAPACITY 190 (TONS); 95 DEG. F EWT, 85 DEG F. LWT; 75.3 DEG. F WB OUTDOOR AIR; 569.0 GPM; ONE (1) 20 HP FAN MOTOR, 480V/3PH. COOLING TOWER SHALL HAVE ONE (1) ELECTRIC BASIN HEATER AT 4 KW (208V/3PH) FOR FREEZE PROTECTION. FURNISH WITH VFD FOR COOLING TOWER FAN MOTOR.

PROVIDE NEMA 3R BASIN HEATER CONTROL PANEL. PANEL SHALL INCLUDE A MAIN NON-FUSED DISCONNECT, PILOT LIGHT, HOA SWITCH, AND 120V CONTROL TRANSFORMER WITH PRIMARY AND SECONDARY SIDE FUSES AND ALL REQUIRED TERMINAL BLOCKS FOR FIELD WIRING BASIN HEATER CONTROL ACCESSORIES. PANEL TO BE FIELD MOUNTED AND FIELD WIRED TO THE BASIN HEATER AND ACCESSORIES.

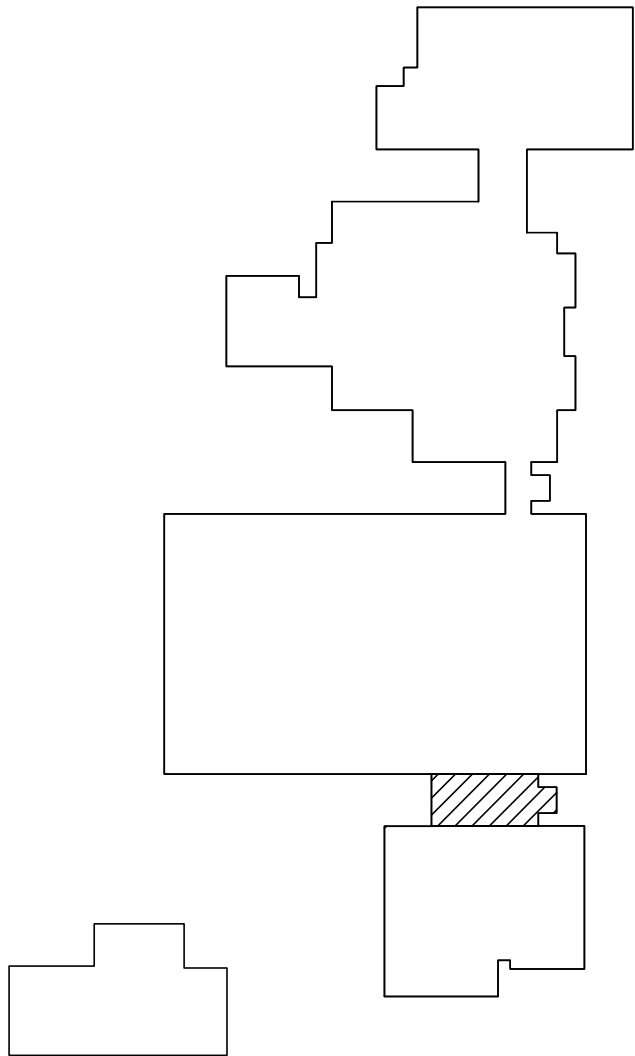
PROVIDE NEMA 3R FAN MOTOR VFD CONTROL PANEL. PANEL SHALL INCLUDE A120V CONTROL TRANSFORMER WITH PRIMARY AND SECONDARY SIDE FUSES AND ALL REQUIRED TERMINAL BLOCKS FOR FIELD WIRING FAN MOTOR CONTROL ACCESSORIES. PANEL TO BE FIELD MOUNTED AND FIELD WIRED TO THE FAN MOTOR AND ACCESSORIES.

GENERAL NOTES:

- ALL PIPING SHALL BE COORDINATED WITH OTHER NEW AND EXISTING DUCTS, PIPES, LIGHTS, STRUCTURAL SYSTEM, CEILING SUPPORTS AND FRAMING BEFORE INSTALLATION. MINOR PIPE OFFSETS SHALL BE PROVIDED AS REQUIRED.
- TEMPORARY AND/OR PERMANENT ALTERATIONS TO EXISTING MECHANICAL AND ELECTRICAL SYSTEMS MAY BE NECESSARY FOR INSTALLATION OF NEW SYSTEMS.
- ALL EQUIPMENT SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S PUBLISHED INSTRUCTIONS.
- MATERIALS AND INSTALLATION SHALL COMPLY WITH LOCAL CODES, APPLICABLE PROVISIONS OF LATEST EDITION OF NATIONAL FIRE PROTECTION ASSOCIATION, LOCAL UTILITY REGULATIONS AND GOVERNMENTAL DEPARTMENTS HAVING JURISDICTION.
- CONTRACTOR SHALL SEAL AND FLASH ALL PENETRATIONS IN EXISTING WALLS.
- VERIFY WALL OPENINGS WITH STRUCTURE.
- VERIFY THE LOCATION OF ALL THERMOSTATS, TEMPERATURE SENSORS, PANELS AND CONTROL INSTRUMENTS WITH THE OWNER PRIOR TO ROUGH-IN.
- VERIFY LOCATIONS OF NEW AND EXISTING EQUIPMENT AND ROUTE OF PIPES WITH EXISTING CONDITIONS.
- REFER TO ELECTRICAL DRAWINGS TO COORDINATE THE EXACT LOCATIONS OF AIR VALVES, PIPING AND OTHER MECHANICAL EQUIPMENT WITH BUILDING COMPONENTS.
- THE CONTRACTOR SHALL PROVIDE ALL SUPPORTS REQUIRED TO MOUNT MECHANICAL EQUIPMENT AND PIPING UNLESS NOTED OTHERWISE.
- WHERE PIPE CONNECTIONS ARE SHOWN CONNECTING TO EXISTING, CONTRACTOR SHALL DETERMINE EXACT LOCATIONS AND CONNECTION SIZES PRIOR TO INSTALLATION.
- ALL REMOTE MOUNTED TEMPERATURE CONTROL DEVICES AND TEMPERATURE CONTROL WIRING SHALL BE FURNISHED AND INSTALLED BY THE MECHANICAL CONTRACTOR.
- EXPOSED PIPING SHALL BE INSTALLED IN PRACTICAL ALIGNMENT WITH THE BUILDING AND SHALL BE ADEQUATELY SECURED TO THE BUILDING STRUCTURE.
- ALL CUTTING AND PATCHING FOR THE INSTALLATION OF NEW WORK SHALL IN THE EXISTING BUILDING SHALL BE DONE BY THE CONTRACTOR.
- THE CONTRACTOR SHALL VISIT THE SITE TO DETERMINE THE SCOPE OF THIS WORK AND VERIFY EXISTING CONDITIONS PRIOR TO SUBMITTING BIDS.
- PROVIDE A 3/4" HOSE-END DRAIN VALVE AT ALL LOW POINTS IN PIPES TRANSPORTING FLUIDS.
- ALL PIPING SHALL BE INSTALLED WITH SUFFICIENT PITCH TO INSURE ADEQUATE DRAINAGE AND VENTING. ALL HIGH POINTS IN WATER LINES SHALL BE PROVIDED WITH MANUAL AIR VENTS.
- PIPING SHALL NOT BE INSTALLED ABOVE ELECTRICAL PANELS. COORDINATE INSTALLATION OF PIPING WITH ELECTRICAL PANELS WHEN SHOWN NEAR PANELS OR OVER ELECTRICAL ROOMS.
- CONDUIT, WIRING, PIPING, AND SUPPORTS SHALL NOT BE LOCATED BELOW OR IN FRONT OF DDC CONTROL PANELS.
- PRIOR TO FINAL ACCEPTANCE OF THE PROJECT BY OWNER, THE CONTRACTOR SHALL DEMONSTRATE ACCESS TO ALL EQUIPMENT AND VALVES IN THE PRESENCE OF THE OWNER'S MAINTENANCE FORCES. ALL STRAINERS IN PIPING SYSTEMS SHALL BE CLEANED. SUBMIT IN WRITING THAT THIS TASK HAS BEEN ACCOMPLISHED TO THE SATISFACTION OF THE OWNER'S REPRESENTATIVE.
- THE CONTRACTOR SHALL INSTRUCT THE OWNER IN THE PROPER OPERATION AND MAINTENANCE OF THE MECHANICAL AND CONTROL SYSTEMS UNTIL THE OWNER IS FULLY PREPARED TO OPERATE AND MAINTAIN THE MECHANICAL AND CONTROL SYSTEMS. HOWEVER, LENGTH OF INSTRUCTION SHALL BE LIMITED TO ONE FULL DAY.
- SYSTEMS SHALL OPERATE UNDER CONDITIONS OF LOAD WITHOUT UNUSUAL OR EXCESSIVE NOISE OR VIBRATION. UNUSUAL NOISE OR VIBRATION SHALL BE CORRECTED.
- EQUIPMENT, MATERIALS, AND LABOR REQUIRED BY THESE CONTRACT DOCUMENTS SHALL BE GUARANTEED TO BE FREE FROM DEFECTIVE MATERIALS OR WORKMANSHIP FOR ONE YEAR AFTER FINAL ACCEPTANCE OF THE PROJECT UNLESS SPECIFIED OTHERWISE. DEFECTIVE MATERIALS OR WORKMANSHIP OCCURRING DURING THIS PERIOD SHALL BE CORRECTED AT NO ADDITIONAL COST.
- CONTRACTOR SHALL BE RESPONSIBLE FOR COVERING AND PROTECTING ALL EXISTING EQUIPMENT DURING DEMOLITION AND CONSTRUCTION.

GENERAL DEMOLITION NOTES:

- EXISTING EQUIPMENT AND MATERIALS TO BE REMOVED SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND REMOVED FROM THE PREMISES UNLESS DIRECTED OTHERWISE BY THE OWNER. THE OWNER MAY DIRECT THE CONTRACTOR TO TURN OVER PARTICULAR EQUIPMENT TO THE OWNER AND LOCATE AS DIRECTED BY THE OWNER.
- THE CONTRACTOR SHALL REMOVE OR ALTER AS NECESSARY EXISTING DUCTWORK, PIPING, EQUIPMENT, EQUIPMENT SUPPORTS, CONTROLS, ELECTRICAL COMPONENTS, AND APPURTENANCES THAT ARE NOT REQUIRED FOR THE EXISTING SYSTEMS TO REMAIN. CONTRACTOR SHALL VISIT THE SITE TO DETERMINE THE SCOPE OF THIS WORK AND VERIFY EXISTING CONDITIONS PRIOR TO SUBMITTING BIDS.
- PROTECT ALL EXISTING ITEMS TO REMAIN FROM DAMAGE DURING DEMOLITION. EXISTING ITEMS THAT ARE DAMAGED OR MISTAKENLY REMOVED DURING DEMOLITION SHALL BE REPAIRED OR REPLACED.
- BUILDING SURFACES WHICH ARE AFFECTED BY HVAC DEMOLITION SHALL BE PATCHED AND REPAIRED AND OR PAINTED TO MATCH THE EXISTING ADJACENT SURFACES.
- THE WORK DESCRIBED IN THESE DRAWINGS INCLUDING EXISTING SYSTEMS AND EQUIPMENT ARE BASED ON CONSTRUCTION DOCUMENTS DATED JUNE 9, 1986 AND ON INFORMATION OBTAINED FROM SITE VISITS. THE CONTRACTOR IS CAUTIONED THAT THE EXISTING HVAC SYSTEM LAYOUTS ARE INDICATED AS ONLY AN APPROXIMATION OF EXISTING CONDITIONS. THE CONTRACTOR SHALL VERIFY ACTUAL SYSTEM CONFIGURATIONS IN THE FIELD AND SHALL COORDINATE ACCORDINGLY.
- INSULATION ON EXISTING EQUIPMENT, PIPING AND DUCTWORK THAT IS DAMAGED OR REMOVED DUE TO THE DEMOLITION WORK SHALL BE REPLACED WITH INSULATION AS SPECIFIED FOR NEW WORK.
- WHERE EXISTING PIPING OR DUCTWORK IS SHOWN TERMINATED, PROVIDE CAPPED OUTLET.
- DEMOLITION ACTIVITIES SHALL BE CLOSELY COORDINATED WITH THE SCHOOL SYSTEM TO MAINTAIN ACTIVE STATUS OF EXISTING SYSTEMS UNTIL SUCH TIME AS THE PLANNED DEMOLITION CAN BE EXECUTED.



KEY PLAN

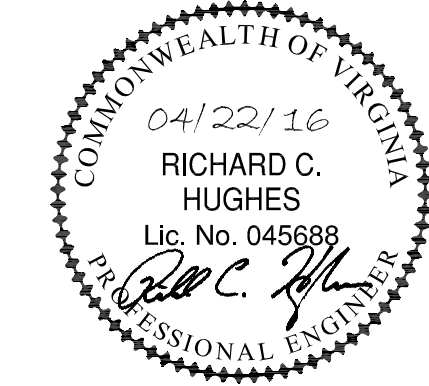
NO SCALE

D.G. COOLEY LOWER - COOLING TOWER REPLACEMENT
CLARKE COUNTY PUBLIC SCHOOLS
BERRYVILLE, VIRGINIA 22611

MECHANICAL DEMOLITION AND NEW WORK PLANS

DESIGNED	DRAWN
RCH	SSL
CHECKED	APPROVED
RCH	LPA
COMM. NO.	DATE
16115.01	04-22-16

SHEET
M-1



REVISION	DATE